Compliance Assistance Tools

Presented October 29, 2008 by:
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Technical Management Section
Bureau of Air Quality



Section Role

 Review monitoring & reporting for compliance

Ensure accuracy in periodic reporting

Reporting Format

- Permit types & formats
 - May require
 - Specific information for individual conditions
 - Additional conditions for specific equipment ID's
 - Individual reports for condition limits

Revised TV & CM Permits

- Revised format
 - Conditions ID specific
 - Conditions include
 - Limits/Standards
 - Testing
 - Monitoring & Reporting

What should I include in Report?

Read the condition!

- Report should include Facility Information:
 - Company Name and Permit No.
 - Facility Address /Plant Location
 - Contact Information (email or phone #)

What should I include in Report?

- Reporting Period Information
 - Reporting Period (MM/DD/YYYY) through (MM/DD/YYYY)
 - Monitoring Frequency (Daily, Weekly, Monthly, etc..)
 - Reporting Frequency (Quarterly, Semi-Annual, etc..)

What should I include in Report?

- Condition Information
 - Type Report (VOC, Opacity, etc...)
 - Condition Number
 - Unit ID
 - Equipment ID

New Compliance Assistance Tools

- New Guidance Forms
 - Why?
 - Provide information listed in new permit formats
 - Accurately report per condition & ID unit
 - Streamline process and data entry for permits
 - Assist Regional Inspectors with consistency

Condition for Revised TV Permit Template

Conditions Unit ID & Equipment ID specific

	PART 5.	C.01 - CON	DITIONS FOR EMISSION UNIT ID 01 - Boile 15
Condition Number	Equipment ID	Regulated Pollutant/ Standard	Conditions
01.1	Bl	Opacity	Limits/Standards: In accordance with SC Regulation 61-62.5, Standard No. 1, Emissions from Fuel Burning Operations, the boiler shall not discharge into the ambient air smoke which exceeds an opacity of 20%. The twenty (20) percent opacity limit may be exceeded for sootblowing, but may not be exceeded for more than six (6) minutes in a one hour period nor be exceeded for more than a total of twenty-four (24) minutes in a twenty-four (24) hour period. Emissions caused by sootblowing shall not exceed sixty (60) percent opacity. The opacity standards set forth above do not apply during startup or shutdown. The owner/operator shall, to the extent practicable, maintain and operate any source including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. The owner/operator shall maintain a log of the time, magnitude, duration and any other pertinent information to determine periods of startup and shutdown and make these records available to a Department representative upon request. State Only: No Testing: Not Required Monitoring/Record Keeping/Reporting/Other: The owner/operator shall perform a visual inspection on a daily basis when burning fuel oil. Visual Inspection means a qualitative observation of opacity during daylight hours where the inspector records results in a log, noting color, duration, density (heavy or light), cause and corrective action taken for any abnormal emissions. The observer does not need to be certified to conduct valid visual inspections. However, at a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, and observer position relative to lighting, wind, and the presence of uncombined water. No periodic monitoring for opacity will be required during periods of burning natural gas or prop ane only. Logs shall be kept to record all visual inspections from date of recording. The owner/operator shall submit semianu

Visual Inspection Form



Visual Inspection Reporting Form
Bureau of Air Quality
Page 1 of 2

Please Refer to Instruction Pages Before Completing This Form When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.





The intent of this form is to assist facilities in reporting qualitative observations of opacity to comply with source-specific visual inspection permit conditions.

			FACILITY INFORMA	ATION			
	1. Date: (MMVDD/YYYY) 2. Com	3. Existing Stat	te Air Permit Number:	-			
	4. Business Mailing Address:		5. City:		6. State:	7. Zip Code	:
	8. Plant Location (Street or Highway):		9. City:		10. State:	11. Zip Cod	е -
	12. Facility Contact Person:			13. Facility	Contact Title:		
++-	14. Facility Contact Phone #:		15. Facility Contac	t Email:			
		Rı	EPORTING P ERIOD INI	ORMATION			
	16. Permit Type: ☐ State Minor Operating ☐ Title V Oper	g Permit rating Permit (If checked, include		al Major Operating Pem ruction Permit (Include		signation (i.e., CA, CB):	
	17. Monitoring Frequency: 🔲 Daily	☐ Weekly ☐ M	fonthly 🔲 Semi-Annual	y 🔲 Annually	☐ Other(Pleas	e List)	
	18. Reporting Frequency: 🔲 Monthly	Quarterty	Semi-Annually	Annually 🔲 Ot	ther(Please List)		
	19. Reporting Period: (MM/DD/YYYY)	through (MM/DD/	YYYY)				

Visual Inspection Form cont...

+1							
Ораспу Емізві	ions Reportin	IG .					
20. Permit Condition Number: 21. Unit ID(s):		22. Equipment ID(s):					
■ No periodic monitoring for opacity required if burning only natural gas or propane during	g reporting period a	s allowed by permit condition.					
☐ There was no observation of incidences of abnormal emissions for the reporting period	listed above. (Exar	mple logs can be found on our website)					
 Incidences of abnormal emissions were observed during the reporting period listed abo Visual Inspections Log for Abnormal Emissions (click here). 	ve. Attach copy of v	risual inspection logwith abnormal emission	ns.				
20. Permit Condition Number: 21. Unit ID(s):		22. Equipment ID(s):					
☐ No periodic monitoring for opacity required if burning only natural gas or propane durin	g reporting period a	s allowed by permit condition.					
☐ There was no observation of incidences of abnormal emissions for the reporting period	listed above. (Exan	nple logs can be found on ourwebsite)					
☐ Incidences of abnormal emissions were observed during the reporting period listed abo Visual Inspections Log for Abnormal Emissions (click here).	ve. Attach copy of v	risual inspection logwith abnormal emission	ns.				
Signa	TURES						
I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in these documents are true, accurate and complete.							
D. THOMS IN THE STATE OF THE ST							
Responsible Official Signature*/Authorized Representative (*Required for Title V sources only)	Title/Position		Date				

Mail Completed Reporting Form and Supporting Documents to:

SC-DHEC
Manager, Technical Management Section
Bureau of Air Quality
2600 Bull Street

Visual Inspection Log for Abnormal Emissions



Visual Inspection Log for Abnormal Emissions
Bureau of Air Quality
Page 1 of 1



(Use this form for reporting abnormal emissions that occurred during the reporting period.)

The intent of this form is to assist facilities in reporting abnormal qualitative observations of opacity to comply with source-specific visual inspection permit conditions.

When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

	QUALITATIVE VISUAL INSPECTION DATA (ABNORMAL EMISSIONS)									
Date	Time	Unit ID	Equip ID	StackID	Color	Duration		Cause	Corrective Action	Observer's Name

Visual Inspection Log



Visual Inspection Log Bureau of Air Quality Page 1 of 1

When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

The intent of this form is to assist facilities in monitoring qualitative observations of opacity to comply with source-specific visual inspection permit conditions.

(Use Visual Inspection Log for Abnormal Emissions for reporting abnormal emissions.)

	QUALITATIVE VISUAL INSPECTION DATA										
Date	Time	UnitID	Equip ID	StackID	Color	Duration	Density	Саиве	Corrective Action	emet/ s'revresd O	
			1								

Deviation/Incident Reporting Form



Deviation/Incident Reporting Form
Bureau of Air Quality
Page 1 of 1

Please Refer to Instruction Pages <u>Before</u> Completing This Form When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.





The intent of this form is to assist facilities in reporting Deviations with source-specific permit conditions.

(e.g., deviations in monitoring ranges, pressure drop, temperature, etc.)

(g-)		XXXX		
	FACILITY INFORMATION			
1. Date: (MM/DD //YYY) 2. Company Name for Permit		3. Existing Sta	te Air Permit Number.	-
4. Business Mailing Address:	5. City:	6. State:	7. Zip Code:	
8. Plant Location (Street or Highway)	9. City:	10. State:	11. Zip Code	: 1000-100
12. Facility Contact Person:		13. Facility Contact Title:		
14. Facility Contact Phone #	15. Facility Contact Email:			
	REPORTING PERIOD INFORMATI	ON		
16. Permit Type: State Minor Operating Permit Title V Operating Permit (# checked, inc	☐ Conditional Major Op Construction Per☐ Construction Per	erating Permit mit (Include construction permit de	signation (i.e., CA, CB);	
17. Monitoring Frequency: Daily 🔲 Weekly	☐ Monthly ☐ Semi-Annually ☐	Annually Dther(Plea	se List)	
18. Reporting Frequency: Monthly Quarterly	☐ Semi-Annually ☐ Annually	☐ Othen(Please List)		
19. Reporting Period: (MM/DD/YYYY) through (MM	N/DD/YYYY)			

Deviation/Incident Reporting Form cont...

	DEVIATIONSANCID	ENCES REPOR	ПИС					
20. Permit Condition Number:	21. UnitID(s):		22.	Equipment ID(s):				
☐ There was no deviation from the condition of the permit for	the reporting period listed above	l.						
Deviation(s) occurred from the condition of the germit for to Deviation/Incident Log (click here).	the reporting period listed above.	(Copy of Deviation	Mnoident Log a	ttached.)				
	Additional Deviations	Ancidences f	Reporting					
20. Permit Condition Number:	21. UnitID(s):			22. Equipment ID(s):				
☐ There was no deviation from the condition of the permit for	the reporting period listed above	ı.						
Deviation/Incident Log (click here).								
	SIGNA	TURES						
I certify under penalty of law that, based on information a accurate and complete.	I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in these documents are true,							
Responsible Official Signature*/Authorized Representative	е	Title/Position			Date			
(*Required for Title V sources only)								
Mail Comple	eted Reporting Form SC-DHE		rting Doc	uments to:				
	Manager, Technical I	Management	Section					
		III Street						
DHEC 2227 (7/2008)	Columbia	SC 29201						

Deviation/Incident Log



Deviation/Incident Log Bureau of Air Quality Page 1 of 1

When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

The intent of this form is to assist facilities in reporting deviations to comply with source-specific permit conditions. (e.g., deviations in monitoring ranges, pressure grop, temperature, etc.)

DEVIATION DATA												
1. PermitCondition No.	2. Date	3. Time	4. Unit ID	5. Equipment ID	6. Duration	7. Deviation	8. Cause	9. Corrective Action				
			1									
			1									
			1									

VOC Emissions Reporting Form



VOC Emissions Reporting Form Bureau of Air Quality Page 1 of 1

Please Refer to Instruction Pages <u>Before</u> Completing This Form
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



The intent of this form is to assist facilities in submitting reporting requirements to comply with source-specific permit conditions.

			-	2	90	-						
FACILITY INFORMATION 1. Date: 01/20/2009 2. Company Name for Permit. ABC, LLC 3. Existing State Air Permit. Number: 1234-6678												
4. Business Mailing Address:	10000	Office Box 1	120,120	5. City:	Anywhere		6. State:	SC	7. Zip Code:	29000-000		
8. Plant Location (Street or H	lighway):	123 AB C Way		9. City:	Rock Hill		10. State:	sc	11. Zip Code:	29000-000		
12. Facility Contact Person: (C.R. Smith				13. Facility Contact Title: Responsible Official							
14. Facility Contact Phone #	8 03-XXX-X	m										
			REPORT	NG PER	100 MFORM	ATTION						
16. Permit⊤ype: ☐ Starbe I		ating Permit Operating Permit (Hohecke	d, include RO sign			Operating Permit Permit (Include co		desig nation	(i.e., CA, CB)			
17. Monitoring Frequency:	☐ Daily	UVeekly	☐ Monthly	☐ Sem	ii-Annu ally	■ Annually	☐ Other(Ple	ease List)				
18. Reporting Frequency: [Monthly	☐ Quarterly	☐ Semi	Annually	☐ Annu al	ly 🔲 Othe	er(Please List)					
19. Reporting Period: (M	IM/D D/YYY	Y) through	(MM/DD/YYYY)									

VOC Emissions Reporting Form Cont...

REPORT INFORMATION									
(PLEASE LIST ALL CONDITIONS, UNIT ID'S, AND EQUIPMENT ASSOCIATED WITH THE REPORT)									
20. Permit Condition Number:	21. Unit ID(s):	22	. Equipment ID(s):						
Attach VOC Emissions Report (click here)									
20. Permit Condition Number:	21. Unit ID(s):	22	. Equipment ID(s):						
Attach VOC Emissions Report (click here)									
	Signat	TURES							
I certify under penalty of law that, based on inform accurate and complete.	ation and belief formed after reason	able inquiry, the statements	and information contained in	these documents are true,					
Responsible Official Signature*/Authorized Repress (*Required for Title V sources only)	entative	Title/Position	Da	ate C					

Mail Completed Reporting Form., VOC Emissions % by Weight Emissions Report, and Supporting Documents to:

SC-DHEC-BAQ Manager, Technical Management Section 2600 Bull Street Columbia, SC 29201



Annual VOC Emissions
% by Weight
Emission Report
Bureau of Air Quality
Page 1 of 1

Items to be filled in by facility 1-5, 6, 8,1-0, 12, 14, 16, 20-21, 23-24

1)Permit Number:

4)Unit ID:

2) Facility Name: 3) Condition Number: 5)Equipment ID:

	6	7	8	9	10	11	12	13	14	15	16	17	16	19
	Product Na		Product Na		oduct Name		Product Name 4		roduct Name		oduct Name		Total Ions	
	Used (gal)	Tons VOC	Used (gal)	Tonsvoc	Used (gal)	Tons VOC	Used (gal)	Toms VOC	Used (gal)	Tons VOC	Used (gal)	Tons VOC	VOC	12M Roll
2007- February		0		0		0		0		0		0	0	
2007- March		0		0		0		0		0		0	U	
2007- April		0		0		0		0		0		0	0	
2007- May		0		0		0		0		0		0	U	
2007- June		U		U		U		U		U		U	U	
2007- July		0		0		0		0		0		0	U	
2007- August		0		0		0		0		0		0	U	
2007-September		0		0		0		0		0		0	0	
2007- October		0		0		0		0		0		0	U	
2007- November		0		0		0		0		0		0	0	
2007- December		0		0		0		0		0		0	b	
2008-January		U		U		U		U		U		U	U	U
2008- February		0		0		0		0		0		0	0	0
2008- March		0		0		0		0		0		0	U	U
2008- April		0		0		0		0		0		0	0	0
2008- May		0		0		0		0		0		0	U	U
2008- June		U		U		U		U		U		U	U	U
2008- July		0		0		0		0		0		0	U	U
2008- August		0		0		0		0		0		0	b	U
2008-September		0		0		0		0		0		0	0	0
2008-October		0		0		0		0		0		0	U	U
2008-November		0		0		0		O		0		0	0	0
2008- December		0		0		0		0		0		0	U	U
	%By Weigh				% By Weigh	ntof VCC*		23)	Density (lb:	s⁄gallonj∞		24)	Density (lbs	:/gallonj™
Product Name 1			Product Na				Product Name 1	1			Product Na			
Product Name 2			Product Na				Product Name 2			l	Product Na			
Product Name 3			Product Na	me 6			Product Name 3	3		l	Product Na	me6		

DHEC 2226 (7/20 *Individual Product VOC information can be obtained form the MSDS or the material supplier.

^{**} Can be obtained from MSDS Sheets



Bureau of Air Quality Technical Management Section

- A 12-Month Rolling Sum is to be calculated for each month in the reporting period.
- There would never be two of the same month in the 12-Month Rolling Sum total.
- As another month is added, another month is dropped from the 12-Month Rolling Sum total.

12-Month Rolling Sums								
Report Frequency - Data needed								
•	_							
Monthly	12 months							
Quarterly	14 months							
Semiannual	17 months							
Annual	23 months							

Example Guidance Production: 12-Month Rolling Sum (Semi-Annual)

	Month/Year	Production (Tons)	Rolling Sum (Tons)		
┌ -•	1 February 07	300	300		
- •	2 March 07	350	650		
- •	3 April 07	400	1050		
	4 May 07	300	1350		
- •	5 June 07	250	1600		
	6 July 07	200	1800		
	7 August 07	190	1990		
	8 September 07	170	2160		
	9 October 07	150	2310		
	10 November 07	150	2460		
	11 December 07	160	2620		
👈	12 January 08	300	2920		
	13 February 08	325	2945		
\	14 March 08	310	2905		
	15 April 08	290	2795		
│	→ 16 May 08		2825		
	17 June 08	275	2850		

SMB 02/20/08 Semi-annual rolling sum

Classroom Project

Calculate VOC

Calculate 12 MRS

Sample Condition

Monitoring/Record Keeping/Reporting/Other: The owner/operator shall maintain records of all volatile organic compounds (VOC). These records shall include the total amount of each material used, the VOC content in percent by weight of each material and any other records necessary to determine facility wide VOC emissions. VOC emissions shall be calculated on a monthly basis and a twelve-month rolling sum shall be calculated for total VOC. Reports of the calculated values and the twelve-month rolling sum shall be submitted semiannually.

An algorithm, including example calculations and emission factors, explaining the method used to determine emission rates shall be included in the initial report. Subsequent submittals of the algorithm and example calculations are unnecessary, unless the method of calculation is found to be unacceptable by the Bureau or if the facility changes the method of calculating emissions and/or changes emission factors.

VOC Reporting Form Classroom Example

When filling out forms on the computer, use only the tab key to move your cursor - do n**√** return key.

The intent of this form is to assist facilities in submitting reporting requirements to comply with source irmit conditions.

FACILITY INFORMATION							
1. Date: 01/20/2009 2. Company Name for Permit: ABC, LLC	3. Existing State Air Permit Number:	1234-5678					
4. Business Mailing Address: Post Office Box 1 5. City: Anywhere	6. State: SC 7. Zip Code:	29000-0001					
8. Plant Location (Street or 123 ABC Way 9. City: Rock Hill Highway):	10. State: SC 11. Zip Code:	29000-0002					
12. Facility Contact Person: C.R. Smith	13. Facility Contact Title: Responsible Official						
14. Facility Contact Phone #:803-XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	il:CRSmith@XXXX.com						
REPORTING PERIOD INFORMATION							
16. Permit Type: ☐ State Minor Operating Permit: ☐ Conditional Major Operating Permit ☑ Title ViOperating Permit (If checked, include RO signature) ☐ Construction Permit (Include construction permit designation (i.e., CA, CB):							
17. Monitoring Frequency: □ Daily □ Weekly □ Monthly □ Semi-Annually	Annually Other(Please List)						
18. Reporting Frequency: ☐Monthly ☐Quarterly ⊠Serni-Annually ☐Arnually ☐Other(Please List)							
19. Reporting Period: 07/01/2008 through 12/31/2008							
REPORT INFORMATION							
(PLEASE LISTALL CONDITIONS, UNIT ID'S, AND EQUIPMENT 20. Permit Condition Number: 01.5 21. Unit ID(s): 01	22. Equipment ID(s): Dryer #I, Dry#2, Dry#2						
21. Onicio(s).	22. Equipment ID(3). Dije mi, Dijme, Dijme						
Attach VOC Emissions Report (click here)							
20. Permit Condition Number: 21. Unit ID(s):	22. Equipment ID(s):						
Attach VOC Emissions Report (click here)							
SIGNATURES							

I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in these documents are true,

MSDS Information to Calculate VOC

- Amount used (gal) used 50 gal/month
- Density (lb/gal) 7.17 lb/gal
- % by wt VOC 96% given or (6.87lb/gal)/(7.17lb/gal)/100= 95.8%

MSDS

URE-BLEND™ 1K Urethane Blending So

Section 9 — Physical and Chemical Properties

PRODUCT WEIGHT 7.17 lb/gal EVAPORATION RATE Slower than ether SPECIFIC GRAVITY 0.86 VAPOR DENSITY Heavier than air BOILING POINT 174 - 384 °F MELTING POINT Not Available VOLATILE VOLUME 96 % SOLUBILITY IN WATER Not Available HMIS RATING 2* - 3 - 0 PAINT SAFE® Code VOLATILE ORGANIC COMPOUNDS (VOC Theoretical)

6.87 lb/gal Less Federally Exempt Solvents 6.87 lb/gal Emitted VOC

Section 10 - Stability and Reactivity

STABILITY - Stable
CONDITIONS TO AVOID - None known.
INCOMPATIBILITY - None known.
HAZARDOUS DECOMPOSITION PRODUCTS - By fire: Carbon Dioxide, Carbon Monoxide
HAZARDOUS POLYMERIZATION - Will not occur

Section 11 — Toxicological Information

Tons VOC= (Amt. used gal./mo.)(density lb/gal)(% by wt./100)/(2000)

Example VOC Calculation Spreadsheet

2008- May 65 0.233064 0 0 0 0 0 0.233064 2.3306 2008- June 60 0.215136 0 0 0 0 0 0.215136 2.38442 2008- July 75 0.26892 0 0 0 0 0 0.26892 2.54577 2008- August 80 0.286848 0 0 0 0 0 0.286848 2.70712 2008- September 85 0.304776 0 0 0 0 0 0.304776 2.8684 2008- October 90 0.322704 0 0 0 0 0 0.322704 3.02983 2008- November 100 0.35856 0 0 0 0 0 0.35856 3.20911	2007 A	25	0.405.400		_		_							0.405400	
2007- October 45					0										
2007- November 50 0.17928 0 0 0 0 0 0 0 0 0					0		0		V				,		
2007 December 55 0.197208 0 0 0 0 0 0 0 0 0					0				V		·				
2008- January 60 0.215136 0 0 0 0 0.215136 1.77487. 2008- February 70 0.250992 0 0 0 0 0 0.250992 1.84658 2008- March 75 0.26892 0 0 0 0 0 0.250992 1.84658 2008- April 80 0.268848 0 0 0 0 0 0.256848 2.24 2008- May 65 0.233064 0 0 0 0 0 0.233064 2.3346 2008- June 60 0.215136 0 0 0 0 0 0.233064 2.33442 2008- July 75 0.26892 0 0 0 0 0 0.268842 2.54577 2008- September 85 0.304776 0 0 0 0 0 0.286848 2.7047 2.8684 2008- November 90 0.322704 0 0<					0		_		_						
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2008- April 80 0.286848 0 0 0 0 0 0 0 0 0			0.250992		0		0		0		0				
2008- May 65 0.233064 0 0 0 0 0 0 0 0 0					0		0		0		0		(
2008- June 60 0.215136 0 0 0 0 0 0.215136 2.38442-208-208-208-209-209-209-209-209-209-209-209-209-209		80			0		0		0		0		(0.286848	2.241
2008- July 75					0		0		0		0		(0.233064	2.33064
2008- August 80 0.286848 0 0 0 0 0 0.286848 2.70712 2008- September 85 0.304776 0 0 0 0 0 0.304776 2.8684 2008- October 90 0.322704 0 0 0 0 0 0.322704 3.02983 2008- November 100 0.35856 0 0 0 0 0 0.35856 3.20911 2008- December 150 0.53784 0 0 0 0 0 0.53784 3.54974 20) % By Weight of VOC* 21) % By Weight of VOC* 23) Density (lbs/gallon)** 24) Density (lbs/gallon)** Product Name 1 96 Product Name 4 Product Name 1 7.47 Product Name 4 Product Name 2 Product Name 5 Product Name 6 Product Name 3 Product Name 6		60			0		0		0		0		(0.215136	2.384424
2008- August 80 0.286848 0 0 0 0 0 0.286848 2.70712 2008- September 85 0.304776 0 0 0 0 0 0.304776 2.8684 2008- October 90 0.322704 0 0 0 0 0 0.322704 3.02983 2008- November 100 0.35856 0 0 0 0 0 0.35856 3.20911 2008- December 150 0.53784 0 0 0 0 0 0.53784 3.54974 20) % By Weight of VOC* 21) % By Weight of VOC* 23) Density (lbs/gallon)*** 24) Density (lbs/gallon)*** Product Name 1 96 Product Name 4 Product Name 1 7.47 Product Name 4 Product Name 2 Product Name 5 Product Name 6 Product Name 3 Product Name 6	2008- July	75	0.26892		0		0		0		0		(0.26892	2.545776
2008- October 90 0.322704 0 0 0 0 0 0.322704 3.02983 2008- November 100 0.35856 0 0 0 0 0 0.35856 3.20911 2008- December 150 0.53784 0 0 0 0 0 0 0.53784 3.54974 20) % By Weight of VOC* 21) % By Weight of VOC * 23) Density (lbs/gallon)** 24) Density (lbs/gallon)** Product Name 1 96 Product Name 4 Product Name 1 7.47 Product Name 4 Product Name 5 Product Name 2 Product Name 5 Product Name 3 Product Name 6 Product Name 6		80	0.286848		0		0		0		0		(0.286848	2.707128
2008- October 90 0.322704 0 0 0 0 0 0.322704 3.02983 2008- November 100 0.35856 0 0 0 0 0 0.35856 3.20911 2008- December 150 0.53784 0 0 0 0 0 0.53784 3.54974 20) % By Weight of VOC* 21) % By Weight of VOC * 23) Density (lbs/gallon)** 24) Density (lbs/gallon)** Product Name 1 96 Product Name 4 Product Name 1 7.47 Product Name 4 Product Name 5 Product Name 2 Product Name 5 Product Name 3 Product Name 6 Product Name 6	2008- September	85			0		0		0		0		(0.304776	2.86848
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Product Name 1 96 Product Name 4 Product Name 1 7.47 Product Name 4 Product Name 2 Product Name 5 Product Name 2 Product Name 5 Product Name 3 Product Name 6 Product Name 3 Product Name 6		% By Weight	of VOC*		21)	% By Weight	of VOC *		23)	Density (lb:	s/gallon)**		24)	Density (lbs/ga	
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Product Name 3 Product Name 6 Product Name 3 Product Name 6															
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	DHEC 2226 (7/2008)	* Individ				ned form the MS								Sheets	
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	DHEC 2226 (7/2008)	* Individ				ed form the MS								Sheets	

Example 12 MRS

Month

Semi-Annual Report For tons of VOC for Dec. 08 12MRS

How to get Dec 08 12MRS

VOC's Nov 08 12 MRS 3.209112 + VOC's Tons Dec 08 + 0.53784 3.746952 -VOC's Tons Dec 07 - 0.197208 Dec 08 12 MRS 3.549744

Note* no two December months in the 12 month totals. Need 17 months of data.

	100 10113	12 WING
2007- August	0.125496	Previously calculated
2007-September	0.143424	Previously calculated
2007- October	0.161352	Previously calculated
2007-November	0.17928	Previously calculated
2007-December	0.197208	Previously calculated
2008-January	0.215136	1.774872
2008-February	0.250992	1.846584
2008-March	0.26892	2.0256864
2008-April	0.286848	2.241
2008-May	0.233064	2.33064
2008-June	0.215136	2.384424
2008-July	0.26892	2.54577
2008-August	0.286848	2.707128
2008-September	0.304776	2.86848
2008-October	0.322704	3.029832
2008-November	0.35856	3.209112
2008-December	0.53784	3.549744

VOC tons

12 MRS

Guidance located on our website at

www.scdhec.net/environment/baq/techman

- Information on webpage:
 - Staff contacts
 - Guidance
 - Title V Annual Compliance Guidance
 - Compliance Assistance Tools
 - Example Forms
 - General Permit Guidance & Calculation Sheet
 - Compliance Assistance Links